

## **REMARKS/ARGUMENTS**

### **I. Status of the Application and Summary of the Office Action**

Claims 1-39 are pending in this case.

The Examiner rejected claims 1-9, 12, 15-23, 25-27, 31-34, and 38 as being unpatentable under 35 U.S.C. § 102(e) in view of Smith et al. U.S. Pat. No. 6,853,982 (hereinafter "Smith"). Claims 10, 11, 13, 14, 24, 28-30, 35-37, and 39 were rejected as being unpatentable under 35 U.S.C. § 103(a) over Smith in view of Fish et al. U.S. Pat. No. 6,035,294 (hereinafter "Fish").

### **II. Summary of Applicant's Response**

Claims 1 and 33 have been amended to correct minor typographical errors. These amendments are fully supported and justified by the original specification, claims, and drawings, and no new matter is added by the amendments.

The rejections of the claims are respectfully traversed. Reconsideration of this application is respectfully requested. Consideration of the accompanying Supplemental Information Disclosure Statement is also requested.

### **III. The Rejections of Claims 1, 31, 32, 33, and 38**

Claims 1, 31, 32, 33, and 38 were rejected under 35 U.S.C. § 102(e) as being anticipated by Smith. The Examiner's rejection is respectfully traversed.

#### **Claim 1**

In rejecting the claims, the Examiner noted that she "interprets the item (as recited in claim 1) corresponds to the session (in the Smith reference), and the properties (as recited in claim 1) corresponds to the items (in the Smith reference)." Final Office Action, p. 13, ll. 19-21.

Contrary to the Examiner's interpretation, applicant respectfully submits that one of ordinary skill in the art in reviewing applicant's claims would not interpret the claims as has been done by the Examiner. Rather, one would interpret the claims so that the "items" in the claims

would be compared to the “items” in Smith. Thus, as discussed in applicant’s Response filed November 28, 2005, Smith does not show or suggest the claimed distance function.

Nevertheless, for the sake of responding to the Examiner’s rejections, the Examiner’s interpretation of claim 1 is shown in the following table, in which the change from item(s) to session(s) is shown with underlining, and the change from property(ies) to item(s) is shown in bold.

Claim 1	Examiner’s Interpretation of Claim 1
A method for searching a collection of <u>items</u> , wherein each <u>item</u> in the collection has a set of <b>properties</b> , comprising the steps of:	A method for searching a collection of <u>sessions</u> , wherein each <u>session</u> in the collection has a set of <b>items</b> , comprising the steps of:
[a] obtaining a query composed of a first set of one or more <b>properties</b> ; and	[a] obtaining a query composed of a first set of one or more <b>items</b> ; and
[b] obtaining a result based on applying a distance function to the query and <u>an item</u> in the collection having a second set of one or more <b>properties</b> , wherein	[b] obtaining a result based on applying a distance function to the query and <u>a session</u> in the collection having a second set of one or more <b>items</b> , wherein
[c] obtaining a result includes determining a third set of <b>properties</b> common to the first set of one or more <b>properties</b> and the second set of one or more <b>properties</b> , and	[c] obtaining a result includes determining a third set of <b>items</b> common to the first set of one or more <b>items</b> and the second set of one or more <b>items</b> , and
[d] the distance function determines a distance between the query and the <u>item</u> in the collection based on the number of <u>items</u> in the collection that are associated with all of the <b>properties</b> in the third set of <b>properties</b> .	[d] the distance function determines a distance between the query and the <u>session</u> in the collection based on the number of <u>sessions</u> in the collection that are associated with all of the <b>items</b> in the third set of <b>items</b> .

In asserting that Smith shows element [c] of claim 1, the Examiner has pointed to col. 19, ll. 21-24, FIG. 3B, and col. 18, line 58 through col. 19, l. 27. Final Office Action, p. 3, ll. 11-14. In asserting that Smith shows element [d] of claim 1, the Examiner has pointed to col. 19, ll. 21-24 (as showing the Ncommon is the number of sessions in which “ITEM\_A” and “ITEM\_B” were viewed) and col. 19, l. 29 through col. 20, l. 33. Final Office Action, p. 3, ll. 17-18.

Contrary to the Examiner’s assertions, however, nowhere is there any showing or suggestion in Smith that a distance between a query and a session is determined as would be required by element [d] under the Examiner’s interpretation. Rather, Smith merely discusses

“measuring the similarity between two items” using a commonality index (Smith, col. 15, ll. 47-48), and counting the “number of users who purchased [or viewed] both [items] A and B” (Smith, col. 15, ll. 17-18 and col. 19, ll. 22-23).

That is, the commonality index similarity in Smith is being measured between two items, and NOT a query and a session as required by element [d] of the claim as interpreted by the Examiner. Moreover, even if a query in Smith were asserted to be equivalent to a session, which applicant asserts is not the case, as suggested by the Examiner’s statements at p. 14, l. 14 through p. 15, l. 5, nowhere in Smith is there any showing or suggestion of measuring a commonality index between two sessions.

Likewise, nowhere in Smith is the Ncommon measurement shown or suggested as being a distance measurement between a query and a session, or even between two sessions, as would be required by the interpretations of element [d] of claim 1 asserted by the Examiner. As stated above, “Ncommon” is the “number of users who purchased [or viewed] both [items] A and B” (Smith, col. 15, ll. 17-18 and col. 19, ll. 22-23). This number is calculated with reference to items A and B and is not being determined in any way as a representation of the distance between a query and a session, or between two sessions. This is apparent from the fact that Ncommon is calculated in order to determine the commonality index, which, as set forth above, is measuring the similarity between two items, not between a query and a session, or between two sessions. Moreover, Ncommon is never described as being associated with any particular queries or sessions.

This is in distinct contrast to what is discussed on p. 14 of applicant’s specification, and cited by the Examiner. There it states that the distance between two movies can be calculated by counting the number of movies in the set that share common properties. Specification, p. 14, ll. 20-28. Nowhere does Smith show or suggest that a distance between two sessions can be calculated by counting the sessions in a set that share common items.

Accordingly, for at least these reasons, applicant respectfully submits that the rejection of claim 1 is improper and should therefore be withdrawn.

Claim 31

The Examiner's interpretation of claim 31 is shown in the following table, in which the change from item(s) to session(s) is shown with underlining, and the change from property(ies) to item(s) is shown in bold.

Claim 31	Examiner's Interpretation of Claim 31
A method for analyzing two sets of <b>properties</b> from a plurality of sets of <b>properties</b> , comprising the steps of:	A method for analyzing two sets of <b>items</b> from a plurality of sets of <b>items</b> , comprising the steps of:
[a] determining a set of <b>properties</b> common to the two sets of <b>properties</b> ;	[a] determining a set of <b>items</b> common to the two sets of <b>items</b> ;
[b] determining the number of sets of <b>properties</b> from the plurality of sets of <b>properties</b> that include the set of common <b>properties</b> ; and	[b] determining the number of sets of <b>items</b> from the plurality of sets of <b>items</b> that include the set of common <b>items</b> ; and
[c] assessing the distance between the two sets of <b>properties</b> as a function of the number of sets of <b>properties</b> that include the set of common <b>properties</b> .	[c] assessing the distance between the two sets of <b>items</b> as a function of the number of sets of <b>items</b> that include the set of common <b>items</b> .

As with claim 1, nowhere does Smith show or suggest "assessing the distance between the two sets of items as a function of the number of sets of items that include the set of common items" as would be required by element [c] of claim 31 under the Examiner's interpretation. Rather, Smith simply discusses determining the similarity between two items and a count of the number of sessions that include both items A and B.

Accordingly, for at least these reasons, applicant respectfully submits that the rejection of claim 31 is improper and should therefore be withdrawn.

Claim 32

The Examiner's interpretation of claim 32 is shown in the following table, in which the change from item(s) to session(s) is shown with underlining, and the change from property(ies) to item(s) is shown in bold.

Claim 32	Examiner's Interpretation of Claim 32
A method for analyzing the relationship between two <u>items</u> in a collection of <u>items</u> , wherein each <u>item</u> in the collection is associated with a set of <b>properties</b> , comprising the steps of:	A method for analyzing the relationship between two <u>sessions</u> in a collection of <u>sessions</u> , wherein each <u>session</u> in the collection is associated with a set of <b>items</b> , comprising the steps of:
[a] obtaining a set of <b>properties</b> with which the two <u>items</u> are commonly associated; and	[a] obtaining a set of <b>items</b> with which the two <u>sessions</u> are commonly associated; and
[b] determining the degree of commonality between the two <u>items</u> as a function of the number of <u>items</u> in the collection that are associated with all of the <b>properties</b> with which the two <u>items</u> are commonly associated.	[b] determining the degree of commonality between the two <u>sessions</u> as a function of the number of <u>sessions</u> in the collection that are associated with all of the <b>items</b> with which the two <u>sessions</u> are commonly associated.

As with claim 1, nowhere does Smith show or suggest "determining the degree of commonality between the two sessions as a function of the number of sessions in the collection that are associated with all of the items with which the two sessions are commonly associated" as would be required by element [b] of claim 32 under the Examiner's interpretation. Rather, Smith simply discusses determining the similarity between two items and a count of the number of sessions that include both items A and B.

Accordingly, for at least these reasons, applicant respectfully submits that the rejection of claim 32 is improper and should therefore be withdrawn.

### Claim 33

The Examiner's interpretation of claim 33 is shown in the following table, in which the change from item(s) to session(s) is shown with underlining, and the change from property(ies) to item(s) is shown in bold.

Claim 33	Examiner's Interpretation of Claim 33
A computer program product, residing on a computer readable medium, for use in searching a collection of <u>items</u> , the computer program product comprising instructions for	A computer program product, residing on a computer readable medium, for use in searching a collection of <u>sessions</u> , the computer program product comprising

Claim 33	Examiner's Interpretation of Claim 33
causing a computer to:	instructions for causing a computer to:
[a] receive a query composed of one or more <b>properties</b> ; and	[a] receive a query composed of one or more <b>items</b> ; and
[b] obtain a result based on applying a distance function to the query and <u>an item</u> in the collection having a second set of one or more <b>properties</b> ,	[b] obtain a result based on applying a distance function to the query and <u>a session</u> in the collection having a second set of one or more <b>items</b> ,
[c] wherein the distance function determines a third set of <b>properties</b> common to the first set of one or more <b>properties</b> and the second set of one or more <b>properties</b> , and determines a distance between the query and the <u>item</u> in the collection based on the number of <u>items</u> in the collection that are associated with all of the properties in the third set of <b>properties</b> .	[c] wherein the distance function determines a third set of <b>items</b> common to the first set of one or more <b>items</b> and the second set of one or more <b>items</b> , and determines a distance between the query and the <u>session</u> in the collection based on the number of <u>sessions</u> in the collection that are associated with all of the <b>items</b> in the third set of <b>items</b> .

As with claim 1, nowhere does Smith show or suggest determining “a distance between the query and the session in the collection based on the number of sessions in the collection that are associated with all of the items in the third set of items” as would required by element [c] of claim 33 under the Examiner’s interpretation. Rather, Smith simply discusses determining the similarity between two items and a count of the number of sessions that include both items A and B.

Accordingly, for at least these reasons, applicant respectfully submits that the rejection of claim 33 is improper and should therefore be withdrawn.

#### Claim 38

The Examiner’s interpretation of claim 38 is shown in the following table, in which the change from item(s) to session(s) is shown with underlining, and the change from property(ies) to item(s) is shown in bold.

Claim 38	Examiner's Interpretation of Claim 38
A computer system for managing data records comprising:	A computer system for managing data records comprising:
[a] an information retrieval subsystem that stores and retrieves data records, each data record being associated with a set of	[a] an information retrieval subsystem that stores and retrieves data records, each data record being associated with a set of <b>items</b> ; and

Claim 38	Examiner's Interpretation of Claim 38
<b>properties; and</b>	
[b] a similarity search subsystem that receives similarity search queries and processes similarity search queries based on a distance function, a similarity search query being associated with a first set of <b>properties</b> ,	[b] a similarity search subsystem that receives similarity search queries and processes similarity search queries based on a distance function, a similarity search query being associated with a first set of <b>items</b> ,
[c] wherein the distance function determines a distance between the query and a data record in the collection having a second set of <b>properties</b> based on determining a third set of <b>properties</b> common to the first set of <b>properties</b> and the second set of <b>properties</b> , and determining the number of data records in the collection that are associated with all of the <b>properties</b> in the third set of <b>properties</b> .	[c] wherein the distance function determines a distance between the query and a data record in the collection having a second set of <b>items</b> based on determining a third set of <b>items</b> common to the first set of <b>items</b> and the second set of <b>items</b> , and determining the number of data records in the collection that are associated with all of the <b>items</b> in the third set of <b>items</b> .

As with claim 1, nowhere does Smith show or suggest determining “a distance between the query and a data record in the collection having a second set of items based on determining a third set of items common to the first set of items and the second set of items” as would be required by element [c] of claim 38 under the Examiner’s interpretation. Rather, Smith simply discusses determining the similarity between two items and a count of the number of sessions that include both items A and B.

Accordingly, for at least these reasons, applicant respectfully submits that the rejection of claim 38 is improper and should therefore be withdrawn.

#### IV. The Rejections of Claims 2-30, 34-37, and 39

Claims 2-30, 34-37, and 39 were rejected under 35 U.S.C. § 102(e) or 103(a) as being anticipated by Smith or obvious from Smith in view of Fish. The Examiner’s rejection is respectfully traversed.

Claims 2-30, 34-37, and 39 which depend from claims 1, 31, 32, 33, and 38 are allowable for the same reasons above that claims 1, 31, 32, 33, and 38 are allowable. Accordingly, withdrawal of the rejections of these claims are respectfully requested.

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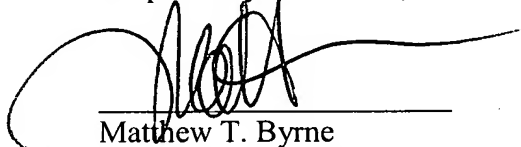
### CONCLUSION

For the reasons stated above, Applicant respectfully submits that the rejections contained in the Final Office Action mailed on February 17, 2006 have been overcome and that the pending claims are in condition for allowance.

Please deduct the fee for the present RCE, set forth in 37 C.F.R. § 1.17(e), and that for a three-month extension of time from our Deposit Account No. 08-0219. A Supplemental Information Disclosure Statement is submitted herewith. No other fees are believed to be due pursuant to 37 C.F.R. § 1.97(b)(4), as the Supplemental Information Disclosure Statement is submitted concurrently with this RCE.

Please charge any other fees that may be due, or credit any overpayment of the same, to Deposit Account No. 08-0219. The Examiner is encouraged to telephone the undersigned attorney for the Applicant to resolve any outstanding issues.

Respectfully Submitted,



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